

SEQUENCE LISTING

<110> POWDERJECT RESEARCH LIMITED AND GLAXO GROUP LIMITED

<120> ADJUVANT

<130> N.88232 GCW

<160> 12

<170> PatentIn version 3.1

<210> 1

<211> 12

<212> PRT

<213> Artificial sequence

<220>

<223> HBsAg in BLAB/C mice

<400> 1

Ile Pro Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu
1 5 10

<210> 2

<211> 9

<212> PRT

<213> Artificial sequence

<220>

<223> HSV CD8 in BLAB/C mice

<400> 2

His Gly Pro Ser Leu Tyr Arg Thr Phe

<210> 3
<211> 1503
<212> DNA
<213> Artificial sequence

<220>

<223> nucleotide sequence of p55 gag insert in pGagOptrpr2
<400> 3
atgggtgccg gagcttcggt actgtctggt ggagagctgg acagatggga gaaaattagg 60
ctgcgcggcgg gaggcaaaaa gaaataacaag ctcaagcata tcgtgtggc ctcgagggag 120
cttgaacggt ttgccgtgaa cccaggcctg ctggaaacat ctgagggatg tcgcccagatc 180
ctggggcaat tgcagccatc cctccagacc gggagtgaag agctgaggtc cttgtataac 240
acagtggcta ccctctactg cgtacaccag aggatcgaga ttaaggatac caaggaggcc 300
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gacactgggc atagcaacca ggtatcacag aactatccta ttgtccaaaa cattcaggc 420
cagatggttc atcaggccat cagccccgg acgctcaatg cctgggtgaa gttgtcgaa 480
gagaaggcct tttctcctga gtttatcccc atgttctccg ctttgagtga gggggccact 540
cctcaggacc tcaatacaat gcttaatacc gtggcggcc atcaggccgc catgcaaatg 600
ttgaaggaga ctatcaacga ggaggcagcc gagtggaca gagtgcattcc cgtccacgct 660
ggcccaatcg cgcccgacgac gatgcgggag cctcgcggct ctgacattgc cggcaccacc 720
tctacactgc aagagcaaat cggatggatg accaacaatc ctcccatccc agttggagaa 780
atctataaac ggtggatcat tctcggtctc aataaaattt ttagaatgta ctctccgaca 840
tccatccttg acattagaca gggacccaaa gagcctttta gggattacgt cgaccggttt 900
tataagaccc tgcgagcaga gcaggcctct caggaggtca aaaactggat gacggagaca 960
ctcctggtac agaacgctaa ccccgactgc aaaacaatct tgaaggcact aggcccggct 1020
gccaccctgg aagagatgat gaccgcctgt cagggagtag gcggacccgg acacaaagcc 1080
agagtgttgg ccgaaggccat gagccaggtg acgaactccg caaccatcat gatgcagaga 1140
gggaacttcc gcaatcagcg gaagatcgtg aagtgtttca attgcggcaa ggagggtcat 1200
accgccccgca actgtcgggc ccctaggaag aaagggtgtt ggaagtgcgg caaggaggga 1260
caccagatga aagactgtac agaacgacag gccaattttc ttggaaagat ttggccgagc 1320

tacaagggga gacctggtaa tttcctgcaa agcaggcccg agcccaccgc cccccctgag 1380
gaatccttca ggtccggagt ggagaccaca acgcctcccc aaaaacagga accaatcgac 1440
aaggagctgt acccttaac ttctctgcgt tctctttg gcaacgaccc gtcgtctcaa 1500
taa 1503

<210> 4

<211> 500

<212> PRT

<213> Artificial sequence

<220>

<223> amino acid sequence of p55 gag insert in pGagOpapr2

<400> 4

Met Gly Ala Arg Ala Ser Val Leu Ser Gly Gly Glu Leu Asp Arg Trp
1 5 10 15

Glu Lys Ile Arg Leu Arg Pro Gly Gly Lys Lys Lys Tyr Lys Leu Lys
20 25 30

His Ile Val Trp Ala Ser Arg Glu Leu Glu Arg Phe Ala Val Asn Pro
35 40 45

Gly Leu Leu Glu Thr Ser Glu Gly Cys Arg Gln Ile Leu Gly Gln Leu
50 55 60

Gln Pro Ser Leu Gln Thr Gly Ser Glu Glu Leu Arg Ser Leu Tyr Asn
65 70 75 80

Thr Val Ala Thr Leu Tyr Cys Val His Gln Arg Ile Glu Ile Lys Asp
85 90 95

Thr Lys Glu Ala Leu Asp Lys Ile Glu Glu Glu Gln Asn Lys Ser Lys
100 105 110

Lys Lys Ala Gln Gln Ala Ala Ala Asp Thr Gly His Ser Asn Gln Val
115 120 125

Ser Gln Asn Tyr Pro Ile Val Gln Asn Ile Gln Gly Gln Met Val His
130 135 140

Gln Ala Ile Ser Pro Arg Thr Leu Asn Ala Trp Val Lys Val Val Glu
145 150 155 160

Glu Lys Ala Phe Ser Pro Glu Val Ile Pro Met Phe Ser Ala Leu Ser
165 170 175

Glu Gly Ala Thr Pro Gln Asp Leu Asn Thr Met Leu Asn Thr Val Gly
180 185 190

Gly His Gln Ala Ala Met Gln Met Leu Lys Glu Thr Ile Asn Glu Glu
195 200 205

Ala Ala Glu Trp Asp Arg Val His Pro Val His Ala Gly Pro Ile Ala
210 215 220

Pro Gly Gln Met Arg Glu Pro Arg Gly Ser Asp Ile Ala Gly Thr Thr
225 230 235 240

Ser Thr Leu Gln Glu Gln Ile Gly Trp Met Thr Asn Asn Pro Pro Ile
245 250 255

Pro Val Gly Glu Ile Tyr Lys Arg Trp Ile Ile Leu Gly Leu Asn Lys
260 265 270

Ile Val Arg Met Tyr Ser Pro Thr Ser Ile Leu Asp Ile Arg Gln Gly
275 280 285

Pro Lys Glu Pro Phe Arg Asp Tyr Val Asp Arg Phe Tyr Lys Thr Leu
290 295 300

Arg Ala Glu Gln Ala Ser Gln Glu Val Lys Asn Trp Met Thr Glu Thr
305 310 315 320

Leu Leu Val Gln Asn Ala Asn Pro Asp Cys Lys Thr Ile Leu Lys Ala
325 330 335

Leu Gly Pro Ala Ala Thr Leu Glu Glu Met Met Thr Ala Cys Gln Gly
340 345 350

Val Gly Gly Pro Gly His Lys Ala Arg Val Leu Ala Glu Ala Met Ser
355 360 365

Gln Val Thr Asn Ser Ala Thr Ile Met Met Gln Arg Gly Asn Phe Arg
370 375 380

Asn Gln Arg Lys Ile Val Lys Cys Phe Asn Cys Gly Lys Glu Gly His
385 390 395 400

Thr Ala Arg Asn Cys Arg Ala Pro Arg Lys Lys Gly Cys Trp Lys Cys
405 410 415

Gly Lys Glu Gly His Gln Met Lys Asp Cys Thr Glu Arg Gln Ala Asn
420 425 430

Phe Leu Gly Lys Ile Trp Pro Ser Tyr Lys Gly Arg Pro Gly Asn Phe
435 440 445

Leu Gln Ser Arg Pro Glu Pro Thr Ala Pro Pro Glu Glu Ser Phe Arg
450 455 460

Ser Gly Val Glu Thr Thr Pro Pro Gln Lys Gln Glu Pro Ile Asp
465 470 475 480

Lys Glu Leu Tyr Pro Leu Thr Ser Leu Arg Ser Leu Phe Gly Asn Asp
485 490 495

Pro Ser Ser Gln
500

<210> 5

<211> 1515

<212> DNA

<213> Artificial sequence

<220>

<223> nucleotide sequence of the p17/24trNEF insert in p17/24trNEF1

<400> 5
atgggtgcga gagcgtcagt attaagcggg ggagaattag atcgatggga aaaaattcgg 60
ttaaggccag gggaaagaa aaaataaaaa ttaaaacata tagtatggc aagcagggag 120
ctagaacgat tcgcagttaa tcctggcctg ttagaaacat cagaaggctg tagacaata 180
ctgggacagc tacaaccatc ctttcagaca ggatcagaag aacttagatc attatataat 240
acagtagcaa ccctctattg tgtgcataa aggatagaga taaaagacac caaggaagct 300
ttagacaaga tagaggaaga gcaaaacaaa agtaagaaaa aagcacagca agcagcagct 360
gacacaggac acagcaatca ggtcagccaa aattacccta tagtgcagaa catccagggg 420

caaatggtagtac atcaggccat atcacctaga actttaaatg catgggtaaa agtagtagaa 480
gagaaggctt tcagcccaga agtgataccc atgtttcag cattatcaga aggagccacc 540
ccacaagatt taaacaccat gctaaacaca gtgggggac atcaagcagc catgcaaatg 600
ttaaaagaga ccatcaatga ggaagctgca gaatggata gagtgcattc agtgcattc 660
gggcctattg caccaggcca gatgagagaa ccaagggaa gtgacatacg aggaactact 720
agtacccttc aggaacaaat aggtggatg acaaataatc cacctatccc agtaggagaa 780
atttataaaa gatggataat cctggatta aataaaatag taagaatgtt tagccctacc 840
agcattctgg acataagaca aggacaaaaa gaacccttta gagactatgt agaccggttc 900
tataaaactc taagagccga gcaagcttca caggaggtaa aaaattggat gacagaaacc 960
tttgttggtcc aaaatgcgaa cccagattgt aagactattt taaaagcatt gggaccagcg 1020
gctacactag aagaaatgtt gacagcatgt cagggagtag gaggacccgg ccataaggca 1080
agagtttgg tgggtttcc agtcacacctt caggtacatt taagaccaat gacttacaag 1140
gcagctgttag atcttagcca cttttaaaa gaaaaggggg gactggaagg gctaattcac 1200
tcccaaagaa gacaagatattt ctttgcattt tggatctacc acacacaagg ctactccct 1260
gattggcaga actacacacc agggccaggg gtcagatatc cactgacctt tggatggtag 1320
tacaagcttag taccagttga gccagataag gttagaagagg ccaataaagg agagaacacc 1380
agcttggtag accctgttag cctgcattttt atggatgacc cggagagaga agtggtagag 1440
tggaggttttgc acagccaccc agcattttcat cacgtggccc gagagctgca tccggagtac 1500
ttcaagaact gctga 1515

<210> 6

<211> 504

<212> PRT

<213> Artificial sequence

<220>

<223> amino acid sequence of the p17/24trNEF insert in p17/24trNEF1

<400> 6

Met Gly Ala Arg Ala Ser Val Leu Ser Gly Gly Glu Leu Asp Arg Trp
1 5 10 15

Glu Lys Ile Arg Leu Arg Pro Gly Gly Lys Lys Lys Tyr Lys Leu Lys
20 25 30

His Ile Val Trp Ala Ser Arg Glu Leu Glu Arg Phe Ala Val Asn Pro
35 40 45

Gly Leu Leu Glu Thr Ser Glu Gly Cys Arg Gln Ile Leu Gly Gln Leu
50 55 60

Gln Pro Ser Leu Gln Thr Gly Ser Glu Glu Leu Arg Ser Leu Tyr Asn
65 70 75 80

Thr Val Ala Thr Leu Tyr Cys Val His Gln Arg Ile Glu Ile Lys Asp
85 90 95

Thr Lys Glu Ala Leu Asp Lys Ile Glu Glu Gln Asn Lys Ser Lys
100 105 110

Lys Lys Ala Gln Gln Ala Ala Ala Asp Thr Gly His Ser Asn Gln Val
115 120 125

Ser Gln Asn Tyr Pro Ile Val Gln Asn Ile Gln Gly Gln Met Val His
130 135 140

Gln Ala Ile Ser Pro Arg Thr Leu Asn Ala Trp Val Lys Val Val Glu
145 150 155 160

Glu Lys Ala Phe Ser Pro Glu Val Ile Pro Met Phe Ser Ala Leu Ser
165 170 175

Glu Gly Ala Thr Pro Gln Asp Leu Asn Thr Met Leu Asn Thr Val Gly
180 185 190

Gly His Gln Ala Ala Met Gln Met Leu Lys Glu Thr Ile Asn Glu Glu
195 200 205

Ala Ala Glu Trp Asp Arg Val His Pro Val His Ala Gly Pro Ile Ala
210 215 220

Pro Gly Gln Met Arg Glu Pro Arg Gly Ser Asp Ile Ala Gly Thr Thr
225 230 235 240

Ser Thr Leu Gln Glu Gln Ile Gly Trp Met Thr Asn Asn Pro Pro Ile
245 250 255

Pro Val Gly Glu Ile Tyr Lys Arg Trp Ile Ile Leu Gly Leu Asn Lys
260 265 270

Ile Val Arg Met Tyr Ser Pro Thr Ser Ile Leu Asp Ile Arg Gln Gly
275 280 285

Pro Lys Glu Pro Phe Arg Asp Tyr Val Asp Arg Phe Tyr Lys Thr Leu
290 295 300

Arg Ala Glu Gln Ala Ser Gln Glu Val Lys Asn Trp Met Thr Glu Thr
305 310 315 320

Leu Leu Val Gln Asn Ala Asn Pro Asp Cys Lys Thr Ile Leu Lys Ala
325 330 335

Leu Gly Pro Ala Ala Thr Leu Glu Glu Met Met Thr Ala Cys Gln Gly
340 345 350

Val Gly Gly Pro Gly His Lys Ala Arg Val Leu Val Gly Phe Pro Val
355 360 365

Thr Pro Gln Val Pro Leu Arg Pro Met Thr Tyr Lys Ala Ala Val Asp
370 375 380

Leu Ser His Phe Leu Lys Glu Lys Gly Gly Leu Glu Gly Leu Ile His
385 390 395 400

Ser Gln Arg Arg Gln Asp Ile Leu Asp Leu Trp Ile Tyr His Thr Gln
405 410 415

Gly Tyr Phe Pro Asp Trp Gln Asn Tyr Thr Pro Gly Pro Gly Val Arg
420 425 430

Tyr Pro Leu Thr Phe Gly Trp Cys Tyr Lys Leu Val Pro Val Glu Pro
435 440 445

Asp Lys Val Glu Glu Ala Asn Lys Gly Glu Asn Thr Ser Leu Leu His
450 455 460

Pro Val Ser Leu His Gly Met Asp Asp Pro Glu Arg Glu Val Leu Glu
465 470 475 480

Trp Arg Phe Asp Ser His Leu Ala Phe His His Val Ala Arg Glu Leu
485 490 495

His Pro Glu Tyr Phe Lys Asn Cys
500

<210> 7
<211> 1518
<212> DNA
<213> Artificial sequence

<220>

<223> nucleotide sequence of the p17/24opt/trNef insert in p17/24opt/trNef1

<400> 7
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cttgaacggt ttgccgtgaa cccaggcctg ctggaaacat ctgagggatg tcgcccagatc 180
ctggggcaat tgcagccatc cctccagacc gggagtgaag agctgaggc cttgtataac 240
acagtggcta ccctctactg cgtacaccag aggatcgaga ttaaggatac caaggaggcc 300
ttggacaaaa ttgaggagga gcaaaacaag agcaagaaga aggcccagca ggcagctgct 360
gacactgggc atagcaacca ggtatcacag aactatccta ttgtccaaaa cattcaggc 420
cagatggttc atcaggccat cagccccgg acgctcaatg cctgggtgaa gttgtcgaa 480
gagaaggcct tttctcctga gtttatcccc atgttctccg ctttgagtga gggggccact 540
cctcaggacc tcaatacaat gcttaataacc gtggcgccc atcaggccgc catgcaaatg 600
ttgaaggaga ctatcaacga ggaggcagcc gagtgggaca gagtgcattcc cgccacgct 660
ggcccaatcg cgcccgacgac gatgcgggag cctcgccgct ctgacattgc cggcaccacc 720
tctacactgc aagagcaaat cggatggatg accaacaatc ctcccatccc agttggagaa 780
atctataaac ggtggatcat tctcggtctc aataaaattt ttagaatgtt ctctccgaca 840
tccatccttg acattagaca gggacccaaa gagcctttt gggattacgt cgaccggttt 900
tataagaccc tgcgagcaga gcaggcctct caggaggtca aaaactggat gacggagaca 960
ctcctggtaa agaacgctaa ccccgactgc aaaacaatct tgaaggcact agggccggct 1020
gccaccctgg aagagatgtt gaccgcctgt cagggagtag gcggacccgg acacaaagcc 1080
agagtgttga tgggggttt tccagtcaca cctcggtac cttaagacc aatgacttac 1140
aaggcagctg tagatcttag ccacttttta aaagaaaagg ggggactgga agggctaatt 1200
cactccaaa gaagacaaga tatccttgat ctgtggatct accacacaca aggtacttc 1260
cctgattggc agaactacac accagggcca ggggtcagat atccactgac ctttggatgg 1320
tgctacaagc tagtaccagt tgagccagat aaggtagaag aggccaataa aggagagaac 1380

accagcttgt tacaccctgt gagcctgcat gggatggatg accccggagag agaagtgtta 1440
gagtggaggt ttgacagcca octagcattt catcacgtgg cccgagagct gcatccggag 1500
tacttcaaga actgctga 1518

<210> 8

<211> 505

<212> PRT

<213> Artificial sequence

<220>

<223> amino acid sequence of the p17/24opt/trNef insert in p17/24opt/trNef1

<400> 8

Met Gly Ala Arg Ala Ser Val Leu Ser Gly Gly Glu Leu Asp Arg Trp
1 5 10 15

Glu Lys Ile Arg Leu Arg Pro Gly Gly Lys Lys Lys Tyr Lys Leu Lys
20 25 30

His Ile Val Trp Ala Ser Arg Glu Leu Glu Arg Phe Ala Val Asn Pro
35 40 45

Gly Leu Leu Glu Thr Ser Glu Gly Cys Arg Gln Ile Leu Gly Gln Leu
50 55 60

Gln Pro Ser Leu Gln Thr Gly Ser Glu Glu Leu Arg Ser Leu Tyr Asn
65 70 75 80

Thr Val Ala Thr Leu Tyr Cys Val His Gln Arg Ile Glu Ile Lys Asp
85 90 95

Thr Lys Glu Ala Leu Asp Lys Ile Glu Glu Glu Gln Asn Lys Ser Lys
100 105 110

Lys Lys Ala Gln Gln Ala Ala Ala Asp Thr Gly His Ser Asn Gln Val
115 120 125

Ser Gln Asn Tyr Pro Ile Val Gln Asn Ile Gln Gly Gln Met Val His
130 135 140

Gln Ala Ile Ser Pro Arg Thr Leu Asn Ala Trp Val Lys Val Val Glu
145 150 155 160

Glu Lys Ala Phe Ser Pro Glu Val Ile Pro Met Phe Ser Ala Leu Ser
165 170 175

Glu Gly Ala Thr Pro Gln Asp Leu Asn Thr Met Leu Asn Thr Val Gly
180 185 190

Gly His Gln Ala Ala Met Gln Met Leu Lys Glu Thr Ile Asn Glu Glu
195 200 205

Ala Ala Glu Trp Asp Arg Val His Pro Val His Ala Gly Pro Ile Ala
210 215 220

Pro Gly Gln Met Arg Glu Pro Arg Gly Ser Asp Ile Ala Gly Thr Thr
225 230 235 240

Ser Thr Leu Gln Glu Gln Ile Gly Trp Met Thr Asn Asn Pro Pro Ile
245 250 255

Pro Val Gly Glu Ile Tyr Lys Arg Trp Ile Ile Leu Gly Leu Asn Lys
260 265 270

Ile Val Arg Met Tyr Ser Pro Thr Ser Ile Leu Asp Ile Arg Gln Gly
275 280 285

Pro Lys Glu Pro Phe Arg Asp Tyr Val Asp Arg Phe Tyr Lys Thr Leu
290 295 300

Arg Ala Glu Gln Ala Ser Gln Glu Val Lys Asn Trp Met Thr Glu Thr
305 310 315 320

Leu Leu Val Gln Asn Ala Asn Pro Asp Cys Lys Thr Ile Leu Lys Ala
325 330 335

Leu Gly Pro Ala Ala Thr Leu Glu Glu Met Met Thr Ala Cys Gln Gly
340 345 350

Val Gly Gly Pro Gly His Lys Ala Arg Val Leu Met Val Gly Phe Pro
355 360 365

Val Thr Pro Gln Val Pro Leu Arg Pro Met Thr Tyr Lys Ala Ala Val
370 375 380

Asp Leu Ser His Phe Leu Lys Glu Lys Gly Gly Leu Glu Gly Leu Ile

385

390

395

400

His Ser Gln Arg Arg Gln Asp Ile Leu Asp Leu Trp Ile Tyr His Thr
405 410 415

Gln Gly Tyr Phe Pro Asp Trp Gln Asn Tyr Thr Pro Gly Pro Gly Val
420 425 430

Arg Tyr Pro Leu Thr Phe Gly Trp Cys Tyr Lys Leu Val Pro Val Glu
435 440 445

Pro Asp Lys Val Glu Glu Ala Asn Lys Gly Glu Asn Thr Ser Leu Leu
450 455 460

His Pro Val Ser Leu His Gly Met Asp Asp Pro Glu Arg Glu Val Leu
465 470 475 480

Glu Trp Arg Phe Asp Ser His Leu Ala Phe His His Val Ala Arg Glu
485 490 495

Leu His Pro Glu Tyr Phe Lys Asn Cys
500 505

<210> 9

<211> 1689

<212> DNA

<213> Artificial sequence

<220>

<223> nucleotide sequence of RT insert of p7077-RT3

<400> 9
atggccccca tcagtcccat cgagaccgtg ccggtaaggc tgaaacccgg gatggacggc 60
cccaaggtca agcagtggcc actcacccgag gagaagatca aggccctggg ggagatctgc 120
accgagatgg agaaagaggg caagatcagc aagatcgccc ctgagaaccc atacaacacc 180
cccggttttgc ccatcaagaa gaaggacagc accaagtggc gcaagctggg ggatttccgg 240
gagctgaata agcggaccca ggatttctgg gaggtccagc tggcatccc ccatccggcc 300
ggcctgaaga agaagaagag cgtgaccgtg ctggacgtgg gcgacgctta cttcagcgtc 360
cctctggacg aggacttttag aaagtacacc gccttacca tcccatctat caacaacgag 420
accctggca tcagatatca gtacaacgtc ctccccagg gctggaaggg ctctccggcc 480

atttccaga	gctccatgac	caagatcctg	gagccgttgc	ggaagcagaa	ccccatatac	540
gtcatctacc	agtacatgga	cgacctgtac	gtgggctctg	acctggaaat	cgggcagcat	600
cgcacgaaga	ttgaggagct	gaggcagcat	ctgctgagat	ggggcctgac	cactccggac	660
aagaagcatc	agaaggagcc	gccattcctg	tggatggct	acgagctcca	tcccgacaag	720
tggaccgtgc	agcctatcgt	cctccccgag	aaggacagct	ggaccgtgaa	cgacatccag	780
aagctggtgg	gcaagctcaa	ctgggcttagc	cagatctatc	ccgggatcaa	ggtgcgccag	840
ctctgcaagc	tgctgcgcgg	caccaaggcc	ctgaccgagg	tgattcccct	cacggaggaa	900
gccgagctcg	agctggctga	gaaccgggag	atcctgaagg	agcccgtgca	cggcgtgtac	960
tatgaccctt	ccaaggacct	gatcgccgaa	atccagaagc	agggccaggg	gcagtggaca	1020
taccagattt	accaggagcc	tttcaagaac	ctcaagacccg	gcaagtacgc	ccgcattgagg	1080
ggcgccccaca	ccaacgtatgt	caagcagctg	accgaggccg	tccagaagat	cacgaccgag	1140
tccatcgtga	tctggggaa	gacacccaag	ttcaagctgc	ctatccagaa	ggagacctgg	1200
gagacgttgt	ggaccgaata	ttggcaggcc	acctggattc	ccgagtggga	gttcgtgaat	1260
acaccccttc	tggtaagct	gtggtaccag	ctcgagaagg	agcccatcgt	gggcgcggag	1320
acattctacg	tggacggcgc	ggccaaccgc	gaaacaaagc	tcgggaaggc	cgggtacgtc	1380
accaaccggg	gccgccagaa	gtcgtcacc	ctgaccgaca	ccaccaacca	gaagacggag	1440
ctgcaggcca	tctatctcgc	tctccaggac	tccggcttg	aggtgaacat	cgtgacggac	1500
agccagtacg	cgctggcat	tattcaggcc	cagccggacc	agtccgagag	cgaactggtg	1560
aaccagatta	tcgagcagct	gatcaagaaa	gagaaggtct	acctcgctg	ggtccggcc	1620
cataaggcata	ttggcggcaa	cgagcaggc	gacaagctgg	tgagtgcggg	gattagaaag	1680
gtgctgtaa						1689

<210> 10

<211> 562

<212> PRT

<213> Artificial sequence

<220>

<223> amino acid sequence of RT insert of p7077-RT3

<400> 10

Met Gly Pro Ile Ser Pro Ile Glu Thr Val Ser Val Lys Leu Lys Pro

1

5

10

15

Gly Met Asp Gly Pro Lys Val Lys Gln Trp Pro Leu Thr Glu Glu Lys
20 25 30

Ile Lys Ala Leu Val Glu Ile Cys Thr Glu Met Glu Lys Glu Gly Lys
35 40 45

Ile Ser Lys Ile Gly Pro Glu Asn Pro Tyr Asn Thr Pro Val Phe Ala
50 55 60

Ile Lys Lys Asp Ser Thr Lys Trp Arg Lys Leu Val Asp Phe Arg
65 70 75 80

Glu Leu Asn Lys Arg Thr Gln Asp Phe Trp Glu Val Gln Leu Gly Ile
85 90 95

Pro His Pro Ala Gly Leu Lys Lys Lys Ser Val Thr Val Leu Asp
100 105 110

Val Gly Asp Ala Tyr Phe Ser Val Pro Leu Asp Glu Asp Phe Arg Lys
115 120 125

Tyr Thr Ala Phe Thr Ile Pro Ser Ile Asn Asn Glu Thr Pro Gly Ile
130 135 140

Arg Tyr Gln Tyr Asn Val Leu Pro Gln Gly Trp Lys Gly Ser Pro Ala
145 150 155 160

Ile Phe Gln Ser Ser Met Thr Lys Ile Leu Glu Pro Phe Arg Lys Gln
165 170 175

Asn Pro Asp Ile Val Ile Tyr Gln Tyr Met Asp Asp Leu Tyr Val Gly
180 185 190

Ser Asp Leu Glu Ile Gly Gln His Arg Thr Lys Ile Glu Glu Leu Arg
195 200 205

Gln His Leu Leu Arg Trp Gly Leu Thr Thr Pro Asp Lys Lys His Gln
210 215 220

Lys Glu Pro Pro Phe Leu Trp Met Gly Tyr Glu Leu His Pro Asp Lys
225 230 235 240

Trp Thr Val Gln Pro Ile Val Leu Pro Glu Lys Asp Ser Trp Thr Val
245 250 255

Asn Asp Ile Gln Lys Leu Val Gly Lys Leu Asn Trp Ala Ser Gln Ile
260 265 270

Tyr Pro Gly Ile Lys Val Arg Gln Leu Cys Lys Leu Leu Arg Gly Thr
275 280 285

Lys Ala Leu Thr Glu Val Ile Pro Leu Thr Glu Glu Ala Glu Leu Glu
290 295 300

Leu Ala Glu Asn Arg Glu Ile Leu Lys Glu Pro Val His Gly Val Tyr
305 310 315 320

Tyr Asp Pro Ser Lys Asp Leu Ile Ala Glu Ile Gln Lys Gln Gly Gln
325 330 335

Gly Gln Trp Thr Tyr Gln Ile Tyr Gln Glu Pro Phe Lys Asn Leu Lys
340 345 350

Thr Gly Lys Tyr Ala Arg Met Arg Gly Ala His Thr Asn Asp Val Lys
355 360 365

Gln Leu Thr Glu Ala Val Gln Lys Ile Thr Thr Glu Ser Ile Val Ile
370 375 380

Trp Gly Lys Thr Pro Lys Phe Lys Leu Pro Ile Gln Lys Glu Thr Trp
385 390 395 400

Glu Thr Trp Trp Thr Glu Tyr Trp Gln Ala Thr Trp Ile Pro Glu Trp
405 410 415

Glu Phe Val Asn Thr Pro Pro Leu Val Lys Leu Trp Tyr Gln Leu Glu
420 425 430

Lys Glu Pro Ile Val Gly Ala Glu Thr Phe Tyr Val Asp Gly Ala Ala
435 440 445

Asn Arg Glu Thr Lys Leu Gly Lys Ala Gly Tyr Val Thr Asn Arg Gly
450 455 460

Arg Gln Lys Val Val Thr Leu Thr Asp Thr Thr Asn Gln Lys Thr Glu
465 470 475 480

Leu Gln Ala Ile Tyr Leu Ala Leu Gln Asp Ser Gly Leu Glu Val Asn
485 490 495

Ile Val Thr Asp Ser Gln Tyr Ala Leu Gly Ile Ile Gln Ala Gln Pro
500 505 510

Asp Gln Ser Glu Ser Glu Leu Val Asn Gln Ile Ile Glu Gln Leu Ile
515 520 525

Lys Lys Glu Lys Val Tyr Leu Ala Trp Val Pro Ala His Lys Gly Ile
530 535 540

Gly Gly Asn Glu Gln Val Asp Lys Leu Val Ser Ala Gly Ile Arg Lys
545 550 555 560

Val Leu

<210> 11

<211> 1689

<212> DNA

<213> Artificial sequence

<220>

<223> nucleotide sequence of the coding insert in p73i-RT3

<400> 11
atggccccca tcagtcccat cgagaccgtg ccggtaaaggc tggacggc 60
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Ile Ser Lys Ile Gly Pro Glu Asn Pro Tyr Asn Thr Pro Val Phe Ala
50 55 60

Ile Lys Lys Lys Asp Ser Thr Lys Trp Arg Lys Leu Val Asp Phe Arg
65 70 75 80

Glu Leu Asn Lys Arg Thr Gln Asp Phe Trp Glu Val Gln Leu Gly Ile
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Pro His Pro Ala Gly Leu Lys Lys Lys Ser Val Thr Val Leu Asp
100 105 110

Val Gly Asp Ala Tyr Phe Ser Val Pro Leu Asp Glu Asp Phe Arg Lys
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Tyr Thr Ala Phe Thr Ile Pro Ser Ile Asn Asn Glu Thr Pro Gly Ile
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Arg Tyr Gln Tyr Asn Val Leu Pro Gln Gly Trp Lys Gly Ser Pro Ala
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Ile Phe Gln Ser Ser Met Thr Lys Ile Leu Glu Pro Phe Arg Lys Gln
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Asn Pro Asp Ile Val Ile Tyr Gln Tyr Met Asp Asp Leu Tyr Val Gly
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Ser Asp Leu Glu Ile Gly Gln His Arg Thr Lys Ile Glu Glu Leu Arg
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Gln His Leu Leu Arg Trp Gly Leu Thr Thr Pro Asp Lys Lys His Gln
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Lys Glu Pro Pro Phe Leu Trp Met Gly Tyr Glu Leu His Pro Asp Lys
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Asn Asp Ile Gln Lys Leu Val Gly Lys Leu Asn Trp Ala Ser Gln Ile
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Tyr Pro Gly Ile Lys Val Arg Gln Leu Cys Lys Leu Leu Arg Gly Thr
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Lys Ala Leu Thr Glu Val Ile Pro Leu Thr Glu Glu Ala Glu Leu Glu
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Leu Ala Glu Asn Arg Glu Ile Leu Lys Glu Pro Val His Gly Val Tyr
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Tyr Asp Pro Ser Lys Asp Leu Ile Ala Glu Ile Gln Lys Gln Gly Gln
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Gly Gln Trp Thr Tyr Gln Ile Tyr Gln Glu Pro Phe Lys Asn Leu Lys
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Thr Gly Lys Tyr Ala Arg Met Arg Gly Ala His Thr Asn Asp Val Lys
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Gln Leu Thr Glu Ala Val Gln Lys Ile Thr Thr Glu Ser Ile Val Ile
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Trp Gly Lys Thr Pro Lys Phe Lys Leu Pro Ile Gln Lys Glu Thr Trp
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Glu Thr Trp Trp Thr Glu Tyr Trp Gln Ala Thr Trp Ile Pro Glu Trp
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Lys Glu Pro Ile Val Gly Ala Glu Thr Phe Tyr Val Asp Gly Ala Ala
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Ile Val Thr Asp Ser Gln Tyr Ala Leu Gly Ile Ile Gln Ala Gln Pro
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Asp Gln Ser Glu Ser Glu Leu Val Asn Gln Ile Ile Glu Gln Leu Ile
515 520 525

Lys Lys Glu Lys Val Tyr Leu Ala Trp Val Pro Ala His Lys Gly Ile
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Gly Gly Asn Glu Gln Val Asp Lys Leu Val Ser Ala Gly Ile Arg Lys
545 550 555 560

Val Leu